WHAT IS CLAIMED IS:

1. A device for driving a first gradient cable, the device comprising;

a guide tube at least partly surrounding at least a section of the first gradient cable;

a housing supporting the first gradient cable in its longitudinal direction;

a driving pinion meshingly engaging with a first portion of the first gradient cable; and

a first guide wheel supporting the gradient cable at a level with the first portion of the first gradient cable.

2. The device as recited in claim 1, wherein the housing accommodates the first gradient cable, and wherein the first guide wheel is secured to the housing.

3. The device as recited in claim 1, further comprising a second gradient cable and a second guide wheel, the second gradient cable being driven by the driving pinion simultaneously with the first gradient cable, and the second guide wheel supporting the second gradient cable at the same level as the first guide wheel.

4. The device as recited in claim 3, wherein the driving pinion includes a first gradient cable inlet side, a first gradient cable outlet side, a second gradient cable inlet side, and a second gradient cable outlet side, and the device further comprises a first and a second guide tube portion at least partially surrounding the first gradient cable and disposed, respectively, at the first gradient cable inlet side and the first gradient cable outlet side, and wherein the device further comprises a third guide tube portion and a fourth guide tube portion at least partially surrounding the second gradient cable and disposed, respectively, at the second gradient cable inlet side and the second gradient cable outlet side.

5. The device as recited in claim 1, wherein the driving pinion includes an inlet side and an outlet side and wherein the first gradient cable is at least partly surrounded by a first guide tube portion disposed at the inlet side and by a second guide tube portion disposed at the outlet side.

6. The device as recited in claim 5, wherein at least one of the first guide tube portion and the second guide tube portion includes a conical enlargement at an end proximal to the driving pinion.

7. The device as recited in claim 1, wherein the guide tube includes a supporting collar disposed in form-fitting engagement in a recess in the housing and supporting the guide tube in a longitudinal direction.

8. The device as recited in claim 1, wherein the housing includes a bearing bushing for pivotably receiving the first guide wheel.

9. The device as recited in claim 8, wherein the first guide wheel includes a bearing spindle, defining a guide wheel axis and a central circular collar extending radially with respect to the bearing spindle, said central collar engaging the first gradient cable.

10. The device as recited in claim 1, wherein the first guide wheel includes a bearing spindle defining a guide wheel axis, and wherein the guide wheel axis is displaceable with respect to the driving pinion, such that a distance of the bearing spindle to the first guide wheel can be adjusted in response to a thickness of the first gradient cable.

11. The device as recited in claim 1, wherein the housing includes an upper housing half and a lower housing half.

12. The device as recited in claim 1, wherein the housing is selected from the group consisting of cast parts, die cast parts, precision cast parts, forming parts, sheet-metal formed parts and construction parts.